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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,960	12/22/2000	Michael Strobel	02581-P0350A	8504

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EXAMINER	
ODLAND, KATHRYN P	
ART UNIT	**PAPER NUMBER**
3743	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/745,960	STROBEL ET AL.	
	Examiner	Art Unit	
	Kathryn Odland	3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 August 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5,6,8-11,14 and 20-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5,6,8-10,and 20-22* is/are rejected.

7)☒ Claim(s) *11,14 and 23* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This is a response to the amendment dated August 30, 2004. Claims 1-3, 5, 6, 8-11, 14 and 20-23 are under consideration.

Claim Rejections - 35 USC § 112

The 35 USC 112 rejections have been withdrawn in light of the amendments and arguments.

Response to Arguments

1. Applicant's arguments filed August 30, 2004 have been fully considered but they are not persuasive.

Applicant has amended claim 1 to include the limitation, "an interference screw" and remove the limitation, "configured as an interference screw." As previously recited in the office action dated May 18, 2004, "The device of Gresser et al. is an interference screw, since that shown in figures 2A-2C is a screw and the term interference is defined as the act or instance of hindering, obstructing, or impeding; something that hinders, obstructs, or impedes according to The American Heritage® Dictionary of the English Language, Third Edition copyright 1192 by Houghton Mifflin Company." Intended use is not given patentable weight in apparatus claims and the device of Gresser et al. is capable of performing the function of "interference." Applicant argues, "As defined in the Application, 'Interference screws have the purpose of anchoring a tendon or a ligament transplant to a bone...'" However, that previously stated by applicant is not a "special definition." The Background of the Invention merely points out that what

purpose interference screws often have, rather than providing a "special definition" for the term. Thus, the dictionary definition of "interference" provides a reasonably broad interpretation since a "special definition" was not clearly established in the specification. This also applies to the other outstanding rejections of claim 1.

Applicant also argues, "Further, Applicant respectfully submits that it would not be obvious to modify Gresser to provide an interference screw." Again to reiterate, there is no modification, the device of Gresser is an interference screw since a "special definition" has not been provided. The device is an interference screw in a reasonably broad interpretation.

2. Applicant's arguments with respect to the rejections in view of Simonian have been fully considered and are persuasive. The rejection in view of Simonian has been withdrawn.

Claim Rejections - 35 USC § 102/103

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5, 6, 8 and 20-22 are rejected under 35 U.S.C. 102(a and/or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gresser et al. in US Patent No. 6,241,771.

Regarding claim 1, Gresser et al. disclose a screw (20) for medical purposes having a screw body made of biodegradable material, as recited in column 3, lines 65-67 and column 4. The device of Gresser et al. is an interference screw, since that shown in figures 2A-2C is a screw and the term interference is defined as the act or an instance of hindering, obstructing, or impeding; something that hinders, obstructs, or impedes according to The American Heritage® Dictionary of the English Language, Third Edition copyright © 1992 by Houghton Mifflin Company. Moreover, the device of Gresser et al. is anchors a transplant in bone. Further, Gresser et al. disclose a device having a head portion having a facial end face, a shaft portion extending from the head portion from an end opposite to the facial end face along an axial direction of the screw body, a threading (such as 21) provided on an outer side of the shaft portion, as recited in column 4, lines 34-43 and seen in figures 2A-2C; up to five axially extending grooves (26) cut into an outer side of the screw body, as seen in figures 2A and 2C; the up to five grooves extending along the head portion and an entire length of the shaft portion, as seen in figures 2A-2C; at least one recess (23) provided in the facial end face of the head portion; a tool (necessary – as disclosed in column 4, lines 34-42). Thus, it would have a projection corresponding to the recess in the facial end face of the head portion of the

screw; the projection can be introduced into the recess for centering the tool on the screw, given the structure. Further, although the drive tool specifics are not explicitly recited, it would be obvious to one with ordinary skill in the art to further have up to five drive elements for inserting into the up to five grooves at least partially for aiding in the insertion of the device. (such as a tool as taught by Jammet et al.)

Regarding claim 2, Gresser et al. disclose that as applied to claim 1, and it is within the scope of the invention and would further be necessary and obvious to one with ordinary skill in the art to assure the depth of the up to at least five axial grooves that are such that the drive element of the driving tool lies within the at least one axially grooves and does not extend beyond an outer periphery of the screw body, for proper insertion given spacial requirements.

Regarding claim 3, Gresser et al. disclose that as applied to claim 1, and it is within the scope of the invention and would further be necessary and obvious to one with ordinary skill in the art to assure a depth of the at the up to five axially grooves that are such that the drive element of the driving tool is housed within the grooves without extending radially beyond the threading of the shaft portion, for proper insertion given spacial requirements.

Regarding claim 5, Gresser et al. disclose that as applied to claim 1, as well as, a recess (23) that is configured as a channel completely passing through the screw body.

Regarding claim 6, Gresser et al. disclose that as applied to claim 1, as well as, several axially extending grooves (26) that are provided to be distributed uniformly about a circumference of the screw body, as seen in figures 2A-2C.

Regarding claim 8, Gresser et al. disclose that as applied to claim 1, as well as, up to five axially extending grooves that are open axially at the facial end face end of the head portion, as seen in figures 2A-2C.

Regarding claim 20, Gresser et al. disclose a screw (20) having an end face; a shaft extending from the head from an end opposite to the end face along an axial direction perpendicular to the head portion; a threading (such as 21) provided on an outer surface of the shaft; and at least one axially extending groove (26) cut into and extending along an outer side of the head and an entire length of the shaft, as seen in figures 5 and 6; and a shaft that tapers from the head portion to the end opposite to the end face. The at least one groove is capable of being provided for inserting of the at least one axially extending drive element of the drive tool therein.

Regarding claim 21, Gresser et al. disclose that as applied to claim 20, as well as at least three grooves, as seen in figures 2A-2C.

Regarding claim 22, Gresser et al. disclose that as applied to claim 21, as well as a head that has at least one recess (23) centered in the end face for receiving a projection on a drive element of the driving tool to center the drive element about the end face.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jammet et al. in US Patent No. 5,941,882.

Regarding claim 20, Jammet et al. disclose a screw (120) having an end face; a shaft extending from the head from an end opposite to the end face along an axial direction perpendicular to the head portion; a threading (116) provided on an outer surface of the shaft; and at least one axially extending groove (118) cut into and extending along an outer side of the head and an entire length of the shaft, as seen in figures 5 and 6.

However, Jammet et al. do not explicitly recite a shaft that tapers from the head portion to the end opposite to the end face. On the other

hand, it would be obvious to one with ordinary skill in the art to modify the invention of Jammet et al. to include a taper, for tapering screws are well known in the art, for the purpose of enhanced gripping. The grooves of Jammet et al. are capable of being used with an insertion tool.

7. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gresser et al. in US Patent No. 6,241,771.

Regarding claims 9 and 10, Gresser et al. disclose that as applied to claims 1 and 8. However, Gresser et al. do not explicitly recite a bridge. However, it would be to one with ordinary skill in the art to provide a bridge for proper alignment.

Allowable Subject Matter

8. Claims 11, 14 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathryn Odland whose telephone number is (571) 272-4801. The examiner can normally be reached on M-F (7:30-5:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A Bennett can be reached on (571) 272-4791. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KO

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